

ABSTRACT

Andesite stone crushing activities at PT. Perwita Karya consists of three stages of crushing using jaw crusher I as first crusher, jaw crusher II as second crusher, and cone crusher as third crusher. The raw materials for stone crusher plant andesite is derived from public mining in Kaliurang area and throughout Progo river were transported to the PT. Perwita Karya using truck Hino. Products produced in the form of crushed stone size:

1. -20+13 mm, with a production of 15,30 tons/hour.
2. -13+6 mm, with a production of 9,24 tons/hour.
3. -6 mm, with a production of 5,99 tons/hour.

Production targets set by PT. Perwita Karya amounting to 250 tons/day or 39,90 tons/hour with percent products size -20+13 mm and $-20+13 \text{ mm} \geq 85 \%$ and percent products size $-6 \text{ mm} \leq 15 \%$. Stone crusher plant capacity to produce andesite stone size -20+13 mm, -13+6 mm, and -6 mm are 30,53 tons/hour or 187,54 tons/day so there is still a shortfall of 62,46 tons/days.

To achieve the production targets set by PT. Perwita Karya of 250 tons/day is necessary to assess the readiness tool on the crusher unit, an assessment of the effectiveness of crusher equipment, and the effectiveness of working hours. Efforts are made to reach the production target of 250 tons/day could do with some improvement alternatives are:

Adding the amount of feeds, changes composition and setting of the crusher.

The results obtained after efforts to repair the alternative produced the final product 57 tons/hour with percent products size -20+13 mm and -13+6 mm are 85,65 %, with 5,80 hours working time/day of the production, targets that are set by the company amounted to 250 tons/day can be reach.